PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(oracle01.027)

Applicant:	Barton, et al.	**Confirmation No:** 9521
Application No:	10/656,525	**Group Art Unit:** 2168
Filed:	9/5/2003	**Examiner:** Morrison, Jay A.

Title: *Apparatus and methods for transferring database objects into and out of database systems*

Commissioner for Patents
Alexandria, MA 22313-1450

Reply to Examiner's Answer under 37 C.F.R. 41.41

Examiner Mailed his *Answer* in the appeal of the above Application on Nov. 27, 2007. In the *Answer*, Examiner substantially repeated the grounds of rejection set forth in his *Final Rejection* of 10/18/2006. In the following *Reply,* Applicants will do the following:

- clarify the status of claims 39-42;
- briefly show why the teachings of Basko and Oracle cannot be combined under 35 U.S.C. 103 to reject independent claims 1, 36, and 43; and
- briefly show why SQL program constructs cannot be applied as prior art against features of Applicants' "queryable control database object" to reject claims 3-8, 12-15, 46, and 51.

The status of claims 39-42

In his *Answer,* Examiner rejects these claims under 35 U.S.C. 102(b) as anticipated by the Oracle reference. As pointed in the *Status of claims* and *Status of amendments* sections of Applicants' amended appeal brief, claims 29-32 were canceled in an *Amendment after Final* filed 2/18/07; that the claims are canceled is further indicated at page 30 of the *Appendix of claims* section of Applicants' amended appeal brief.

Why Basko and Oracle cannot be combined under 35 U.S.C. 103

In his rejection of claim 1 under 35 U.S.C. 103 at pages 5 and 20 of his *Answer*, Examiner proceeds substantially as follows:

1. Oracle relational database systems have mechanisms for transferring database objects into and out of the data relational data base system (the claim's "transfer mechanism").
2. The SQL CREATE PROCEDURE statement may be used to create a stored procedure object; a stored procedure object may be constructed that controls operation of any component of the relational database system, and thus a stored procedure object may be constructed that controls the transfer mechanism; this stored procedure object is thus a "control database object" as set forth in the claim.
3. The stored procedure object is, however, not "queryable" as required by the claim.
4. Basko's aggregation metadata tables control aggregation of data in Basko's system; the aggregation metadata tables are queryable and are thus queryable control database objects.
5. If Basko's queryable aggregation tables are substituted for the stored procedure object, the result is the apparatus of claim 1.

Many of the difficulties with Examiner's analysis have already been pointed out in Applicants' *Appeal Brief*; an additional difficulty is that the substitution of the queryable aggregation tables for the stored procedure object violates a fundamental principle of the design and construction of digital systems, namely the distinction between code objects and data objects. Code objects contain code that is executed on data contained in data objects, responds to the data, and may alter the data, but the code is not altered when it is executed. In the database management systems in which the invention of claim 1 is implemented, data objects are objects that are queryable; as the name "stored procedure object" implies, stored procedure objects are code objects, and as such, they are not queryable. Further, because stored procedure objects are code objects and queryable objects are data objects, stored procedure objects are not interchangeable with queryable objects. The substitution of the queryable aggregation tables for the stored procedure object that is required for the rejection is thus not possible and the rejection fails for that reason as well. The Board will immediately see that the above logic also applies to the rejection of claim 43.

The fact that Applicants' claimed "queryable control database object" is a *data object* and can consequently change during the execution of a job is the reason why the queryable control database object can specify the status of a job (claims 9-11), and this in turn permits a job to be stopped and restarted. The fact that the queryable control database object is a data object also means that it can represent the job as long as the job exists. This in turn permits the user interface of claims 26-35, including attachment, and detachment, and modification of the manner in which the job is performed. It should further be pointed out here that there is nothing in Basko's queryable aggregation tables which indicates the status of an aggregation job or permits the user interface of claims 26-35.

Examiner's application of SQL constructs against the additional limitations of the "queryable control database object" of claims 3-8, 12-15, 46-51, and 53-55

The fundamental distinction between code objects and data objects also means that the SQL constructs expressed by the code in the stored procedure objects cannot be used as references against limitations of Applicants' queryable control database objects. To give just one example, the SQL SELECT statement with an ORDER BY clause specifies how the code contained in a stored procedure object is to construct a table in the database system from data contained in one or more other tables in the database system and how the table entries are to be ordered; it does not specify in a "queryable control database object" "an order in which the transfer mechanism transfers the objects in the set", as required by claim 3.

Respectfully submitted,
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